ABSTRACT OF THE DISCLOSURE

A system for sensing light transmitted with reduced optical aberrations into the interior of an enclosure utilizing a liquid filled cavity. A window is disposed on the exterior surface of the enclosure for allowing light to pass into the enclosure. A lens is disposed on the interior side of the window, defining a cavity between the window and the lens. A fluid is disposed within that cavity. An optical sensor is disposed in the interior of the enclosure, and positioned to receive light through the window and the lens. The exterior surface of the window is shaped to conform to the exterior surface of the enclosure. The fluid is selected for having an index of refraction that minimizes the mismatch with the index of refraction of the window.